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**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

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*Ex parte* KYLE A. RYAN and SUZANNE L. CHARNOS

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Appeal 2008-1176  
Application 10/714,728  
Technology Center 3700

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Decided: March 31, 2008

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Before DEMETRA J. MILLS, ERIC GRIMES, and LORA M. GREEN,  
*Administrative Patent Judges.*

GRIMES, *Administrative Patent Judge.*

**DECISION ON APPEAL**

This is an appeal under 35 U.S.C. § 134 involving claims to a method for sealing a cup. The Examiner has rejected the claims as obvious. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

**BACKGROUND**

“Coffee shops, take-out restaurants, and other establishments commonly serve beverages in disposable cups having plastic lids. In most cases, the lids include an opening allowing the consumer to drink the beverage through the lid, without removing it” (Spec. 1). “[T]here is a need

for a device that is able to seal beverage lids to prevent spillage without detracting from the convenience of a drink-through beverage lid” (*id.* at 2).

The Specification discloses “a cover for a drink-through beverage cup” that “comprises a substantially flat plate having a generally orthogonal projection that is sized and shaped to extend into the opening of a typical drink-through lid. The seal is inserted into the lid during transport, and is easily removable to allow the beverage to be consumed” (*id.*).

Figure 1A of the application is reproduced below:

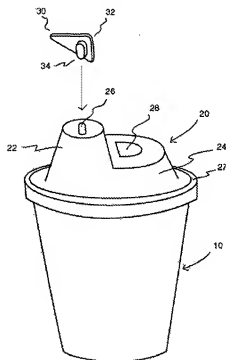


Figure 1A is said to show a preferred embodiment (*id.* at 3: 14) of the invention: “The seal 30 includes a generally flat plate 32 having an orthogonal projection 34. . . . The projection 34 has a cross-sectional shape (in a plane substantially parallel to the plate 32) that substantially matches the shape of the opening 26.” (*Id.* at 4: 6-9.)

## DISCUSSION

### 1. CLAIMS

Claims 1-15 are pending and on appeal. Claims 1 and 9 are representative and read as follows:

Claim 1: A method for sealing a cup lid, comprising:  
providing a beverage cup;  
placing a lid on the cup, the lid having a planar surface formed [sic]  
having an aperture formed therein;  
selecting a seal from a plurality of interchangeable seals,  
each of the seals having a plate with an upper surface, a lower surface,  
and a projection having substantially constant cross-section in a plane  
parallel to the plate attached to and extending away from the lower surface  
of the plate,  
the plate being sized such that at least a portion of the plate extends  
radially beyond a top edge of the lid when the seal is attached to the lid,  
the projection being configured to be insertable into the drink-through  
opening having the projection engaging the aperture in a friction fit to  
prevent liquid within the cup from leaking through the drink-through  
opening when the projection is inserted into the drink-through opening, and  
further wherein the seal is fully separated from the lid and disposable  
when the projection is not inserted into the opening; and  
inserting the projection into the lid opening.

Claim 9: The method of claim 1, wherein the seal further comprises  
an indicia attached to the upper surface of the plate and a cover removably  
attached to the upper surface of the plate, wherein the cover hides the indicia  
from view when the cover is attached to the plate.

### 2. OBVIOUSNESS I

Claims 1-8, 14, and 15 stand rejected under 35 U.S.C. § 103 as  
obvious in view of DeGrow<sup>1</sup> and Moran.<sup>2</sup> Claims 2-8, 14 and 15 have not

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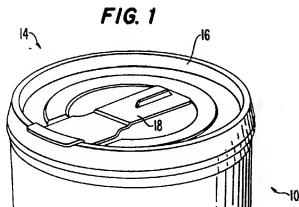
<sup>1</sup> DeGrow, US 5,148,936, Sep. 22, 1992

<sup>2</sup> Moran, US 6,745,505, Jun. 8, 2004

been argued separately and therefore stand or fall with claim 1. 37 C.F.R. § 41.37(c)(1)(vii).

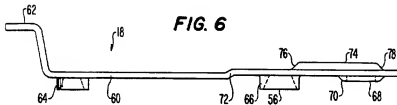
The Examiner relies on DeGrow for disclosing “the claimed method except for the step of selecting the seal from a plurality” (Ans. 2). The Examiner relies on Moran for disclosing “that it is known to select a seal from a plurality in order to distinguish bottles from each other” (*id.*). The Examiner concludes that it “would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the method of DeGrow with the user selecting a seal from a plurality as taught by Moran in order to distinguish the beverage containers” (*id.* at 2-3).

We conclude that the Examiner has set forth a *prima facie* case that claim 1 would have been obvious to the ordinary artisan. DeGrow discloses a “closure cover for a liquid container [that] includes a body portion that is releasably connected to the container and mounts a stopper member for rotational movement between positions that alternately expose or close dispensing and vent openings” (DeGrow, abstract). A portion of Fig. 1 of DeGrow is shown below.



DeGrow describes the figure as showing a cup (10) and closure cover (14) that comprises a body portion (16) and a stopper member (18) (DeGrow, col. 2, ll. 41-48). Stopper member 18 can be rotated to expose drinking and venting openings (*id.* at col. 2, ll. 50-52).

DeGrow's Figure 6 is shown below:



The figure shows a cross section of stopper member 18. DeGrow also discloses that the stopper member has “[a] handle 62 and ... depending flange 64 for sealing the dispensing opening” at one end (*id.* at col. 3, ll. 63-64), an “axle lug 56” that can be inserted into the axle opening in the lid (*id.* at col. 3, l. 64 to col. 4, l. 9), and “an annular centering boss 68” at the other end for a vent opening (*id.* at col. 4, ll. 19-25). DeGrow also discloses that the axle lug is a “generally cup-shaped member whose exterior surface about the lower end edge possesses a slight annular enlargement or rib 66” (*id.* at col. 3, ll. 66-68). DeGrow also discloses that the axle lug 56 can be “snapped into the opening and the stopper member securely connected to the base portion for rotational movement (*id.* at col. 4, ll. 7-9).

Moran discloses a “collection of beverage bottles [that] includes respective color-coded beverage caps” that indicate the “identity of the user” (Moran, abstract) and that the prior art includes “a collection of caps for chemical containers, to identify the contents of the containers having the caps thereon” (*id.* at col. 1, ll. 27-28).

We agree with the Examiner that it would have been *prima facie* obvious to combine the teachings of DeGrow and Moran and thereby arrive at the invention of claim 1. DeGrow discloses a cup, lid, and seal meeting all the structural limitations recited in claim 1. Moran discloses that a lid may be selected from a variety of lids to indicate a container's user or contents. It would have been obvious to apply the teaching of Moran to the teaching of DeGrow and select the seal used in DeGrow from a plurality of such seals to indicate a container's user or contents.

Appellants argue that the invention of claim 1 includes limitations neither taught nor suggested in the cited references and specifically not found in DeGrow (App. Br. 10-11). Specifically, Appellants argue that the DeGrow arm 60 "is not a plate" because it "includes a vertical step 72 a rib 74 and an upwardly extending handle 62" (*id.* at 11). Appellants further argue that the "plain meaning of a plate is 'a smooth flat thin piece of material'" (citing Merriam Webster Dictionary 2006) and the "irregular shape of the arm 60 ... does not meet this definition" (App. Br. 10-11). Appellants further argue that DeGrow does not disclose that "a portion of the plate extends radially beyond a top edge of the lid when the seal is attached to the lid" because the DeGrow handle 62 "is not a plate" (*id.*). Appellants further argue that the device of Moran fails to remedy the deficiencies of DeGrow (*id.* at 12).

We are not persuaded by these arguments. It is well settled that "claims in an application are to be given their broadest reasonable interpretation consistent with the specification, and that claim language should be read in light of the specification as it would be interpreted by one

of ordinary skill in the art.” *In re Sneed*, 710 F.2d 1544, 1548 (Fed. Cir. 1983) (citation omitted). In the instant case, the Specification does not define the term “plate”. The Specification’s only guidance on the meaning of “plate” is in its reference to a “substantially flat plate” (Spec. 2: 11) or a “generally flat plate” (*id.* at 4: 6). While these terms do not appear in the claims, and we will not read them in, they do indicate that the plate does not have to be completely flat, since “generally” and “substantially” allow a certain amount of variation. Therefore, we interpret “plate” to mean a structure that has a planar structure generally rather than a structure that must be completely flat, and thus the term is broad enough to encompass the structure of the DeGrow stopper member.

Appellants further argue that DeGrow does not disclose a plate with a projection having substantially constant cross-section in a plane parallel to the plate because the DeGrow’s sealing flange 64 “has ‘tapered sides that converge downwardly,’” “the axle lug 56 has ‘a slight annular enlargement or rib 66,’” and “the annular centering boss 68 ... has a ‘generally frusto-conical sectional shape and an exterior surface 70 inclined at about 45°” (App. Br. 11).

We are not persuaded by this argument. The instant Specification does not define the phrase “substantially constant cross section.” The Specification does, however, state that “although the projection is shown [in Figure 1A] as having sidewalls that are substantially parallel . . . , they may be tapered to enhance the ability of the seal to be retained within the spout. . . . Such a projection is tapered so that it has a larger circumference at the end adjacent the plate 32” (Spec. 4: 15-19). Therefore, we interpret the



term “substantially constant cross section” to allow some variation in cross section, and to encompass at least the “axle lug 56” of DeGrow, which DeGrow discloses as having only a slight annular enlargement at the lower end edge.

“Absent claim language carrying a narrow meaning, the PTO should only limit the claim based on the specification or prosecution history when those sources expressly disclaim the broader definition.” *In re Bigio*, 381 F.3d 1320, 1325 (Fed Cir. 2004). Thus, it would be improper to limit claim 1 only to those seals having a projection with a completely constant cross-section.

Appellants argue that DeGrow does not disclose the limitation that “the seal is fully separated from the lid and disposable when the projection is not inserted into the opening” because the DeGrow stopper arm “is secured to the lid by means of the axle lug 56” (Appeal Br. 11). Appellants thus argue that “disengaging the sealing flange 64 from the lid does not cause the arm 60 to be ‘fully separated from the lid’” (*id.*).

We are not persuaded by this argument. As set forth above, the Specification teaches that the DeGrow stopper arm is simply snapped onto the lid body. Given that the arm can be snapped onto the lid body, DeGrow reasonably suggests, as recognized by the Examiner (Ans. 4), that the arm could also be snapped off of the lid body without destroying either the arm or the body portion of the lid. Appellants’ argument that disengaging the sealing flange 64 from the lid does not cause the arm 60 to be fully separated from the lid is not persuasive. Both the DeGrow flange 64 and annular centering boss 68 appear to be designed to be readily opened and closed and

thus readily disengaged from the lid body, with the result that unsnapping of the axle lug would fully separate the stopper arm from the lid.

Appellants further argue there is “no suggestion to select the arm 60 ‘from a plurality of interchangeable seals’” because the “arm 60 is not a twist on lid or the like that is readily attached and detached completely such that it may function as a game piece” (App. Br. 13). Appellants argue that the “arm 60 of DeGrow is intended to remain connected to the lid when the arm 60 is moved between opened and closed positions” (*id.*).

We do not find this argument to be persuasive. “The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1739 (2007). “[W]hen the question is whether a patent claiming the combination of elements of prior art is obvious,” the relevant question is “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *Id.* at 1740.

As discussed above, DeGrow discloses the cup, lid, and seal recited in the instant claims and teaches that the seal can be easily snapped onto the lid. Further, as discussed above, Moran discloses that lids for containers can be used to indicate the container’s contents or user. The combination of “selecting a seal from a plurality of seals” taught by Moran and the seal (i.e., stopper arm) taught by DeGrow) appears to be nothing more than the combination of old elements to yield predictable results because one of skill in the art would readily understand that the snap on seals of DeGrow could be used, like Moran’s twist-on seals, to indicate a container’s contents or user.

### 3. OBVIOUSNESS II

Claims 9-13 stand rejected under 35 U.S.C. § 103 as obvious in view of DeGrow, Moran, and Reidinger.<sup>3</sup> Claims 10-13 have not been argued separately and therefore stand or fall with claim 10. 37 C.F.R. § 41.37(c)(1)(vii).

The Examiner relies on DeGrow and Moran for the disclosure set forth above but finds that those references do not teach the “removably attached cover” on the seal, as required by claim 9 (Ans. 3). The Examiner finds that Reidinger discloses “that it is known to provide a lid with a removably attached cover” (*id.*). The Examiner concludes that it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the modified method of DeGrow with the cover of Reidinger to prevent access to indicia (*id.*).

We conclude that the Examiner has set forth a prima facie case that claim 9 would have been obvious to the ordinary artisan. DeGrow and Moran are discussed above. Reidinger discloses that game pieces are used by retailers in promotions to increase sales of their products (Reidinger, col. 1, ll. 19-26). Reidinger also discloses a lid for a beverage cup that has a well, a game piece in the well, and a sealing member attached to the lid that conceals the game piece (Reidinger, abstract and Fig. 7).

We agree with the Examiner that it would have been prima facie obvious to one of skill in the art at the time the invention was made to combine the teachings of DeGrow, Moran and Reidinger and thereby arrive at the invention of claim 9. DeGrow and Moran are discussed above.

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<sup>3</sup> Reidinger et al., US 6,311,860 B1, Nov. 6, 2001

Reidinger discloses that beverage lids may contain concealed game pieces, i.e. the indicia and cover recited in claim 9.

One of skill in the art would have considered it obvious to combine Reidinger's game piece and cover with DeGrow's snap-on seal because Reidinger discloses that providing game pieces (with a cover) on beverage lids is known in the art. Those of ordinary skill in the art would have appreciated that Reidinger's teachings with respect to soft-drink cup lids would also apply to lids like those taught by DeGrow, and that DeGrow's sealing member would be an appropriate location for providing a game piece used in a promotion to increase sales.

Appellants argue that there is no teaching or suggestion in the cited references to modify the DeGrow stopper arm to bear an indicia and a cover because DeGrow's stopper arm is not a readily removable soft-drink container lid as in Moran and Reidinger (App. Br. 14). Appellants further argue that "the irregular upper surface of the stopper arm 60, including the vertical offset 72 and the rib 74, teach away from the use of a seal and indicia inasmuch as printing indicia and securing a seal would be extremely difficult" (*id.*).

We do not find these arguments to be persuasive. As set forth above, we find that DeGrow's stopper arm would be readily separable from the lid, and further, such separation would not be required to remove the indicia cover and expose the indicia on the stopper arm. Appellants' argument that attaching indicia to the DeGrow stopper arm would be impractical is not supported by evidence. In our opinion, DeGrow's stopper arm appears large

enough to accommodate indicia. Appellants' argument to the contrary, in the absence of supporting evidence, is therefore not persuasive.

#### SUMMARY

The Examiner's rejections are supported by the preponderance of the evidence of record. We therefore affirm the rejection of claims 1-15 under 35 U.S.C. § 103.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

#### AFFIRMED

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